National Wetlands Inventory Map Report
For
Region 3
(Southwestern Los Angeles County and Southern Ventura County, California)

Project ID: RO1Y07P11_So_CA_grant_area_3

Project Area:

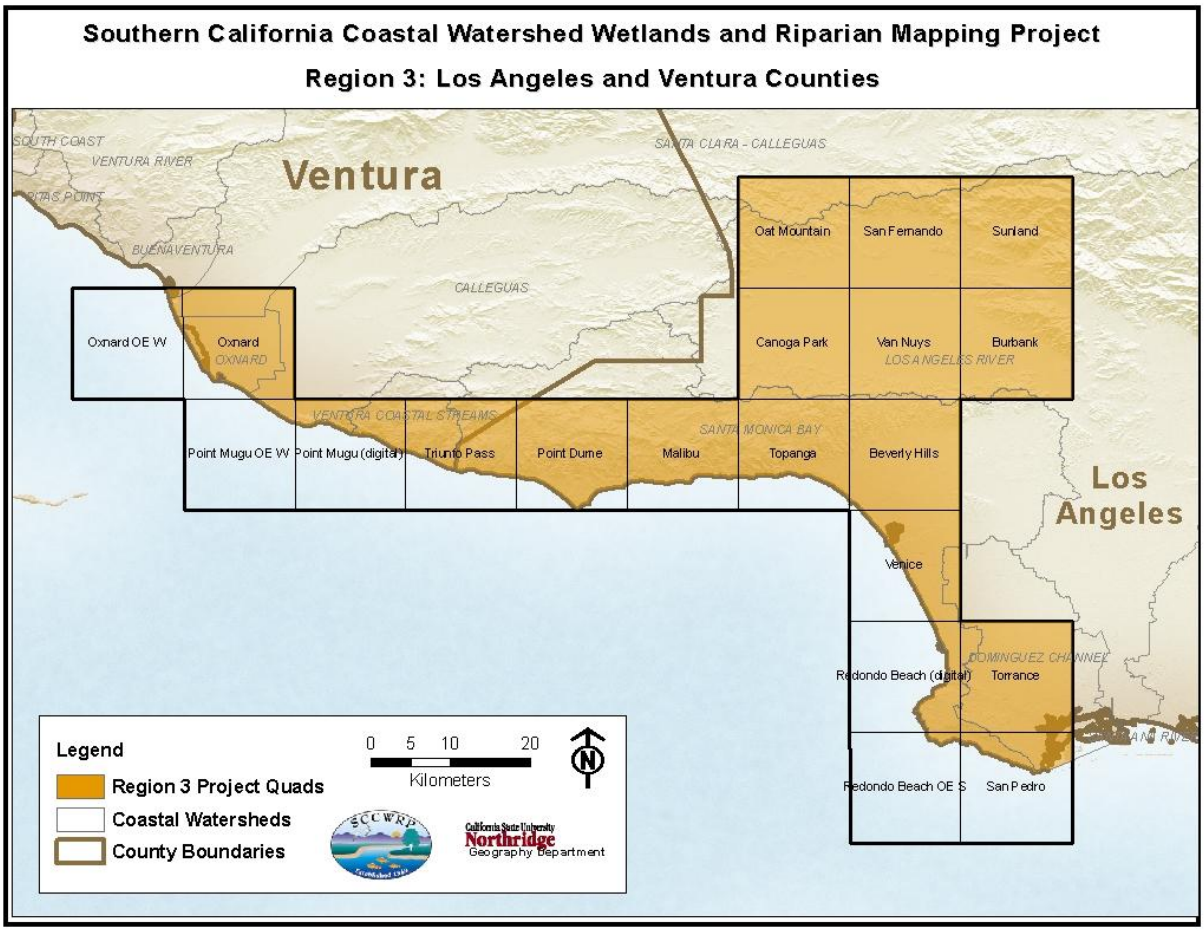
Los Angeles SW
Oxnard
Oxnard OEW
Point Mugu OEW

Los Angeles SE
Burbank
Beverly Hills
Canoga Park
Malibu
Oat Mountain
Point Dume
San Fernando
Sunland
Topanga
Van Nuys
Venice
Point Mugu
Triunfo Pass

Long Beach NE
Redondo Beach
Redondo Beach OES
San Pedro
Torrance

See Figure 1.

Figure 1



Source Imagery:

For all quads listed (Los Angeles and Ventura, California):

Identification_Information:
Citation:
Citation_Information:
Originator: USDA-FSA Aerial Photography Field Office
Title: Index of source acquisition dates.
Publication_Date: 20060324
Edition: Version
Geospatial_Data_Presentation_Form: vector digital data
Publication_Information:
Publication_Place: Salt Lake City, Utah
Publisher: USDA-FSA Aerial Photography Field Office
Description:
Abstract:
This data set contains lines and/or polygons delineating the

boundary between DOQQ imagery used in the creation of a compressed county mosaic (CCM). The DOQQ and CCM products were created from imagery acquired in the National Agriculture Imagery Program (NAIP). These boundary lines can be used as a tool in determining the image source and date of each portion of the CCM. The boundary lines separating each DOQQ may be the actual seam line location or an approximation. This is because the various vendors acquiring and processing the data use different algorithms to create the DOQQ and CCM products. Since the seam line may be an approximation, portions of the CCM along the boundary may actually come from the imagery on the other side of the seam line.

The NAIP acquires digital ortho imagery during the agricultural growing seasons in the continental U.S.. A primary goal of the NAIP program is to enable availability of ortho imagery within a year of acquisition. NAIP provides two main products: 1 meter ground sample distance (GSD) ortho imagery rectified to a horizontal accuracy of within +/- 3 meters of reference digital ortho quarter quads (DOQQ's) from the National Digital Ortho Program (NDOP); and, 2 meter GSD ortho imagery rectified to within +/- 10 meters of reference DOQQs. The tiling format of NAIP imagery is based on a 3.75' x 3.75' quarter quadrangle with a 300 meter buffer on all four sides. NAIP quarter quads are formatted to the UTM coordinate system using NAD83. NAIP imagery may contain as much as 10% cloud cover per tile.

Purpose:

This index will aid USDA Service Centers in identifying and delineating source acquistion date boundaries for the compressed county mosaic as they administer USDA programs for their customers.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20060324

Currentness_Reference: ESRI shapefile creation date.

Status:

Progress: Complete

Collateral Data:

- USGS 1:24,000 topographic quadrangles
- USGS Digital Raster Graphics
- USGS - NHD – National Hydrography Dataset
- Microsoft Virtual Earth Online

- Google Earth Online
- National Wetlands Inventory Polygons (2006)
- Soil Survey Database (SSURGO) of California (2006)
- Vegetation Data – LCMMP – CA Dept of Forestry and Fire (2005)
- NAPP, CIR, aerial photography (date: mm-dd-yyyy)
  Burbank: NW, SW, SE (08-22-1989); NE (08-26-1989)
  Beverly Hills: NW, NE, SW, SE (08-22-1989)
  Canoga Park: NW, SW, NE, SE (06-10-2002)
  Malibu: NW, NE, SW, SE (06-11-2002)
  Point Dume: NW, NE, SW, SE (06-12-2002)
  Point Mugu: NW, NE (06-12-2002)
  Point Mugu OE W: NE (06-20-1989)
  Redondo Beach: SE (06-10-2002)
  Redondo Beach OE S: NE (06-10-2002)
  San Fernando: NW, NE, SW, SE (06-11-2002)
  San Pedro: NW, NE (06-10-2002)
  Sunland: NW, NE, SW, SE (06-11-2002)
  Topanga: NW, SW (06-14-2002); NE, SE (06-10-2002)
  Torrance: NW, NE, SW, SE (06-10-2002)
  Triunfo Pass: NW, SW, NE, SE (06-12-2002)
  Van Nuys: SW, SE (08-22-1989)

Inventory Method:

The delineations were done "heads-up" in ESRI ArcGIS 9.x ArcInfo software on above mentioned sources of ortho-rectified CIR and Natural Color Imagery (1- meter ground resolution). The date and time of year the imagery was acquired is listed above under the Source Imagery Heading. Collateral aerial photography (NAPP, CIR, 1989, 2002, 2003 1:40,000 scale) was used on a 4X mirror stereoscope for stereoscopic interpretation.

Field reconnaissance was conducted on 12/13/2007, 7/22/2008, 8/4/2008, 8/20/2008, and 9/11/2008. The purpose of the field work was to correlate varying signatures found on the photography to actual ground conditions, and the verify delineations and classifications of the more complex wetlands. Vegetation, soils, and hydrologic conditions were examined at field sites. GPS locations and photos were collected at all sites visited.

Data Limitations:

The user of the map is cautioned that, due to the limitation of mapping primarily through aerial photo interpretation, a small percentage of wetlands may have gone unidentified. Since the photography was taken during a particular time and season, there may be discrepancies between the map and current field conditions. Changes in landscape which occurred after the photography was taken would result in such discrepancies. Aerial photo interpretation and heads-up mapping were completed at the Center for Geographic Studies of California State

University Northridge, by Center students and staff. Data were reviewed for quality control by USFWS Pacific Southwest Region NWI Staff.

Classification:

The wetland classifications that appear in Region 3 are in accordance with the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).

General Description of the Project Area:
(Based on the ecological subregion description:
http://www.fs.fed.us/r5/projects/ecoregions/261bd.htm,
http://www.fs.fed.us/r5/projects/ecoregions/261bf.htm, and
http://www.fs.fed.us/r5/projects/ecoregions/261bg.htm)

The project area lies within Los Angeles and Ventura Counties and encompasses 20 1:24,000 USGS quadrangles scattered throughout the Calleguas, Dominguez Channel, Los Angeles River, Oxnard, Santa Clara-Calleguas, Santa Monica Bay, and Ventura Coastal Streams watersheds. The area includes, from east to west, the valleys of the Santa Clara River and Calleguas Creek, the Santa Monica Mountains, San Fernando Valley, and Los Angeles Plain. The area also includes the Verdugo Mountains, San Rafael Hills, and the Palos Verdes Hills.

The valleys of the Santa Clara River and Calleguas Creek include gently sloping alluvial fans, terraces, and a plain at the mouths of the streams. The elevation of this area ranges from sea level to about 800 feet. Dunes are present in a narrow strip adjacent to the coast. The climate, heavily influenced by marine air, is hot and subhumid. The mean annual temperature is 56° to 60° F. Mean annual precipitation, practically all in the form of rain, is 12 to 18 inches. The predominant natural plant communities include California sagebrush series and Purple sage series. There are small areas of Pickleweed series. There are no natural lakes or ponds, other than temporary ponding behind dunes.

The Santa Monica Mountains are steep mountains with narrow to broad summits and narrow canyons. The mountains trend east-west. The elevation range is from sea-level up to 3111 feet on Sandstone Peak. There many are other peaks and ridges above 2500 feet. The mean annual precipitation is about 15 to 25 inches, practically all in the form of rain. Mean annual temperature is about 54° to 62° F. The predominant natural plant communities include California sagebrush - California buckwheat series and Mixed sage series at lower elevations and Chamise series and Mixed chaparral shrublands at higher elevations. There is some Coast live oak series. There are no natural lakes.

The San Fernando Valley and Los Angeles Plain are areas of nearly level floodplains and terraces and gently sloping alluvial fans. There are small areas of marine terraces, but they are relatively inextensive compared to fluvial terraces. The Verdugo Mountains San Rafael Hills, and Palos Verdes Hills are areas of steep mountains and moderately steep hills at the fringes of the valley and plain. Dunes are present along the coast north of the Palos Verdes Hills. Elevation ranges from sea-level to about 1000 feet on the Los Angeles Plain, slightly higher in the San Fernando Valley, and up to 3077 feet in the Verdugo Mountains. The climate is hot and

subhumid; it is modified by marine influence greatly on the Los Angeles Plain and moderately in the San Fernando Valley. Mean annual temperature is about 58° to 64° F. Mean annual precipitation, practically all in the form of rain, is about 12 to 20 inches. Summer fog is common. The predominant natural plant communities are California sagebrush - California buckwheat series and Mixed sage series. Coast live oak series and California walnut series are common, but not extensive. Chamise series and Mixed chaparral shrublands are common in the Verdugo Mountains and San Rafael Hills. California sycamore series occurs in riparian areas.

Description of attribute values:

WETLAND ATTRIBUTE	DESCRIPTION
E1UBL	Permanently flooded, deepwater tidal habitat with low energy and variable salinity, influenced and often semi-enclosed by land.
E1UBLh	Permanently flooded, deepwater tidal habitat with low energy and variable salinity, influenced and often semi-enclosed by land and created by an impoundment.
E1UBLx	Permanently flooded, deepwater tidal habitat with low energy and variable salinity, influenced and often semi-enclosed by land and created by an excavation.
E2ABM	Irregularly exposed, intertidal salt marsh dominated by plants that grow principally on or below the surface of the water for most of the growing season.
E2ABN	Regularly flooded, intertidal salt marsh dominated by plants that grow principally on or below the surface of the water for most of the growing season.
E2EM/SSP	Irregularly flooded, intertidal salt marsh characterized by a matrix of erect, rooted, herbaceous hydrophytes and scrub-shrub vegetation.
E2EM/USN	Regularly flooded, intertidal salt marsh characterized by a matrix of erect, rooted, herbaceous hydrophytes and intertidal flat with less than 30 percent vegetation cover.
E2EM/USP	Irregularly flooded, intertidal salt marsh characterized by a matrix of erect, rooted, herbaceous hydrophytes and intertidal flat with less than 30 percent vegetative cover.
E2EMN	Regularly flooded, intertidal salt marsh characterized by erect, rooted, herbaceous hydrophytes.
E2EMNh	Regularly flooded, intertidal salt marsh characterized by erect, rooted, herbaceous hydrophytes and created by an impoundment.
E2EMNx	Regularly flooded, intertidal salt marsh characterized by erect, rooted, herbaceous hydrophytes and created by an excavation.
E2EMP	Irregularly flooded, intertidal salt marsh characterized by erect, rooted, herbaceous hydrophytes.
E2EMPh	Irregularly flooded, intertidal salt marsh characterized by erect, rooted, herbaceous hydrophytes and created by an impoundment.

E2EMPx	Irregularly flooded, intertidal salt marsh characterized by erect, rooted, herbaceous hydrophytes and created by an excavation.
E2RSNr	Regularly flooded, intertidal rocky shore, emplaced by man, with less than 30 percent vegetative cover.
E2RSPr	Irregularly flooded, intertidal rocky shore, emplaced by man, with less than 30 percent vegetative cover.
E2SBM	Irregularly exposed, intertidal channel beds
E2SBMx	Irregularly exposed, intertidal channel beds created by an excavation.
E2SBN	Regularly flooded, intertidal channel beds.
E2SBNx	Regularly flooded, intertidal channel beds created by an excavation.
E2SS/EMP	Irregularly flooded, intertidal salt marsh characterized by a matrix of scrub-shrub and erect, rooted, herbaceous hydrophytes.
E2SSP	Irregularly flooded, intertidal salt marsh characterized by scrub-shrub vegetation.
E2SSPh	Irregularly flooded, intertidal salt marsh characterized by scrub-shrub vegetation and created by an impoundment.
E2US/ABM	Irregularly exposed, intertidal flat characterized by a matrix of unconsolidated shore with less than 30 percent vegetative cover and marsh dominated by plants that grow principally on or below the surface of the water for most of the growing season.
E2US/ABMh	Irregularly exposed, intertidal flat characterized by a matrix of unconsolidated shore with less than 30 percent vegetative cover and marsh dominated by plants that grow principally on or below the surface of the water for most of the growing season and created by an impoundment.
E2US/ABP	Irregularly flooded, intertidal flat characterized by a matrix of unconsolidated shore with less than 30 percent vegetative cover and marsh dominated by plants that grow principally on or below the surface of the water for most of the growing season.
E2US/EMN	Regularly flooded, intertidal salt marsh characterized by a matrix of erect, rooted, herbaceous hydrophytes and intertidal flat with less than 30 percent vegetation cover.
E2US/EMP	Irregularly flooded, intertidal salt marsh characterized by a matrix of erect, rooted, herbaceous hydrophytes and intertidal flat with less than 30 percent vegetative cover.
E2USM	Irregularly exposed, intertidal flat with less than 30 percent vegetative cover.
E2USMh	Irregularly exposed, intertidal flat with less than 30 percent vegetative cover created by an impoundment.
E2USMx	Irregularly exposed, intertidal flat with less than 30 percent vegetative cover created by an excavation.

E2USN	Regularly flooded, intertidal flat with less than 30 percent vegetative cover.
E2USNh	Regularly flooded, intertidal flat with less than 30 percent vegetative cover created by an impoundment.
E2USNx	Regularly flooded, intertidal flat with less than 30 percent vegetative cover created by an impoundment.
E2USP	Irregularly flooded, intertidal flat with less than 30 percent vegetative cover.
E2USPh	Irregularly flooded, intertidal flat with less than 30 percent vegetative cover created by an impoundment.
E2USPx	Irregularly flooded, intertidal flat with less than 30 percent vegetative cover created by an excavation.
L1ABHx	Permanently flooded, deepwater habitat greater than 20 acres in size dominated by plants that grow principally on or below the surface of the water for most of the growing season and that is created by an excavation.
L1UBFh	Semipermanently flooded, deepwater habitat greater than 20 acres in size that is created by an impoundment (e.g., reservoir).
L1UBFx	Semipermanently flooded, deepwater habitat greater than 20 acres in size that is created by an excavation (e.g., large quarry pit).
L1UBHh	Permanently flooded, deepwater habitat greater than 20 acres in size that is created by an impoundment (e.g., reservoir).
L1UBHr	Permanently flooded, deepwater habitat greater than 20 acres in size that is created by an impoundment (e.g., reservoir) and has an artificial bed.
L1UBHx	Permanently flooded, deepwater habitat greater than 20 acres in size that is created by an excavation.
L1UBK	Artificially flooded, deepwater habitat greater than 20 acres in size.
L1UBKr	Artificially flooded, deepwater habitat greater than 20 acres in size with an artificial substrate and that is created by an excavation.
L2EMCh	Seasonally flooded Lacustrine fringe wetland characterized by erect, rooted, herbaceous hydrophytes. Wetland supported or created by an impoundment (e.g., reservoir fringe).
L2UBF	Semi-permanently flooded, open water habitat extending from the shoreward boundary to a depth of 2 meters.
L2UBFh	Semi-permanently flooded, open water habitat extending from the shoreward boundary to a depth of 2 meters that is created by an impoundment.
L2UBHh	Permanently flooded, open water habitat extending from the shoreward boundary to a depth of 2 meters that is created by an impoundment.

L2UBHx	Permanently flooded, open water habitat extending from the shoreward boundary to a depth of 2 meters that is created by an excavation.
L2US/EMCh	Seasonally flooded Lacustrine fringe characterized by a matrix of unvegetated wetland with less than 30 percent vegetative cover and wetland with erect, rooted, herbaceous hydrophytes. Wetland supported or created by an impoundment (e.g., reservoir fringe).
L2USAh	Temporarily flooded Lacustrine fringe unvegetated wetland characterized by less than 30 percent cover of erect, rooted, herbaceous hydrophytes. Wetland supported or created by an impoundment (e.g., reservoir fringe).
L2USAr	Temporarily flooded Lacustrine fringe unvegetated wetland characterized by less than 30 percent cover of erect, rooted, herbaceous hydrophytes. Wetland supported or created by an impoundment and having an artificial substrate.
L2USAh	Temporarily flooded Lacustrine fringe unvegetated wetland characterized by less than 30 percent cover of erect, rooted, herbaceous hydrophytes. Wetland supported or created by an impoundment and excavation.
L2USC	Seasonally flooded Lacustrine fringe unvegetated wetland characterized by less than 30 percent cover of erect, rooted, herbaceous hydrophytes.
L2USCh	Seasonally flooded Lacustrine fringe unvegetated wetland characterized by less than 30 percent cover of erect, rooted, herbaceous hydrophytes. Wetland supported or created by an impoundment (e.g., reservoir fringe).
L2USCx	Seasonally flooded Lacustrine fringe unvegetated wetland characterized by less than 30 percent cover of erect, rooted, herbaceous hydrophytes. Wetland supported or created by an excavation (e.g., fringe of large quarry pit).
M1ABL	Permanently flooded, open ocean deepwater habitat dominated by plants that grow principally on or below the surface of the water for most of the growing season.
M1UBL	Permanently flooded, open ocean deepwater habitat.
M2RS/ABN	Regularly flooded, high energy rocky marine shores and beaches interspersed by a matrix of plants that grow principally on or below the surface of the water for most of the growing season.

M2RS/ABNr	Regularly flooded, high energy rocky marine shores and beaches, with a substrate emplaced by man, interspersed by a matrix of plants that grow principally on or below the surface of the water for most of the growing season.
M2RSN	Regularly flooded, high energy rocky marine shores and beaches.
M2RSNr	Regularly flooded, high energy rocky marine shores and beaches, with a substrate emplaced by man.
M2RSP	Irregularly flooded, high energy rocky marine shores and beaches.
M2RSPr	Irregularly flooded, high energy rocky marine shores and beaches, with a substrate emplaced by man.
M2USN	Regularly flooded, high energy marine beaches and bars, with less than 30 percent vegetative cover.
M2USP	Irregularly flooded, high energy marine beaches and bars, with less than 30 percent vegetative cover.
PABCh	Seasonally flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and created by the construction of an impoundment.
PABCx	Seasonally flooded ponds characterized by a matrix of aquatic beds (e.g., pondweed or algae) and created by an excavation.
PABFh	Semi-permanently flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g., pondweed or algae) and created by the construction of an impoundment.
PABFx	Semi-permanently flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and created by an excavation.
PABH	Permanently flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and herbaceous vegetation
PABHh	Permanently flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and created by the construction of an impoundment.
PABHr	Permanently flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and created by an excavation with an artificial substrate.
PABHx	Permanently flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and created by an excavation.
PABKr	Artificially flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and created by an excavation with an artificial substrate.
PABKx	Artificially flooded depressions and floodplains characterized by a matrix of aquatic beds (e.g. pondweed or algae) and created by an excavation.

PEM/SSA	Temporarily flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation.
PEM/SSAh	Temporarily flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation created by the construction of an impoundment.
PEM/SSAx	Temporarily flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation created by an excavation.
PEM/SSB	Saturated wetland consisting of a matrix of herbaceous and scub-shrub vegetation usually associated with springs.
PEM/SSC	Seasonally flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation.
PEM/SSCh	Seasonally flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation created by the construction of an impoundment.
PEM/SSCr	Seasonally flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation created by an excavation.
PEM/SSCx	Seasonally flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation created by an excavation.
PEM/USC	Seasonally flooded depressions and floodplains characterized by a mixture of herbaceous vegetation and unconsolidated substrate.
PEM/USCh	Seasonally flooded depressions and floodplains characterized by a mixture of herbaceous vegetation and unconsolidated substrate created by the construction of an impoundment.
PEM/USR	Seasonally flooded, freshwater tidal floodplains and banks characterized by a mixture of herbaceous vegetation and unconsolidated substrate
PEMA	Temporarily flooded wetlands dominated by herbaceous vegetation.
PEMAf	Temporarily flooded depressions and floodplains currently being farmed, but would otherwise support hydrophytes if farming is discontinued.
PEMAh	Temporarily flooded wetlands dominated by herbaceous vegetation created by the construction of an impoundment.

PEMAs	Temporarily flooded wetlands dominated by herbaceous vegetation where the substrate is a result of the deposition of spoil materials.
PEMAx	Temporarily flooded wetlands dominated by herbaceous vegetation created by an excavation.
PEMB	Wetlands dominated by herbaceous vegetation in depressions or below springs where the water table is usually at or near the surface.
PEMBh	Wetlands dominated by herbaceous vegetation in depressions or below springs where the water table is usually at or near the surface and is maintained by the construction of an impoundment.
PEMBx	Wetlands dominated by herbaceous vegetation in depressions or below springs where the water table is usually at or near the surface created by an excavation.
PEMC	Seasonally flooded wetlands dominated by herbaceous vegetation.
PEMCs	Seasonally flooded wetlands dominated by herbaceous vegetation where the substrate is a result of the deposition of spoil materials.
PEMCf	Seasonally flooded depressions and floodplains currently being farmed, but would otherwise support hydrophytes if farming is discontinued.
PEMCh	Seasonally flooded wetlands dominated by herbaceous vegetation created by the construction of an impoundment.
PEMCr	Seasonally flooded wetlands dominated by herbaceous vegetation with an artificial substrate and created by an excavation.
PEMCx	Seasonally flooded wetlands dominated by herbaceous vegetation created by an excavation.
PEMF	Semi-permanently flooded depressions dominated by herbaceous vegetation.
PEMFh	Semi-permanently flooded depressions dominated by herbaceous vegetation and created by the construction of an impoundment.
PEMFx	Semi-permanently flooded depressions dominated by herbaceous vegetation created by an excavation.
PEMH	Permanently flooded depressions dominated by herbaceous vegetation.
PEMHh	Permanently flooded depressions dominated by herbaceous vegetation and created by the construction of an impoundment.
PEMHx	Permanently flooded depressions dominated by herbaceous vegetation created by an excavation.
PEMJ	Intermittently flooded depressions dominated by herbaceous vegetation.

PEMKh	Artificially flooded depressions dominated by herbaceous vegetation and created by the construction of an impoundment.
PEMKx	Artificially flooded depressions dominated by herbaceous vegetation and created by an excavation.
PEMR	Seasonally flooded, freshwater tidal floodplains and banks that are dominated by herbaceous vegetation.
PEMRh	Seasonally flooded, freshwater tidal floodplains and banks that are dominated by herbaceous vegetation and created by the construction of an impoundment.
PEMRx	Seasonally flooded, freshwater tidal floodplains and banks that are dominated by herbaceous vegetation and created by an excavation
PEMS	Temporarily flooded, freshwater tidal floodplains and banks dominated by herbaceous vegetation.
PEMSh	Temporarily flooded, freshwater tidal floodplains and banks dominated by herbaceous vegetation and created by the construction of an impoundment.
PEMV	Permanently flooded freshwater tidal floodplains and banks dominated by herbaceous vegetation.
PFO/EMC	Seasonally flooded depressions, riverine banks and floodplains characterized by a matrix of forested and herbaceous vegetation.
PFO/SSA	Temporarily flooded depressions, riverine banks and floodplains characterized by a matrix of forested and scrub-shrub vegetation.
PFO/SSAh	Temporarily flooded depressions, riverine banks and floodplains characterized by a matrix of forested and scrub-shrub vegetation created by an impoundment.
PFO/SSC	Seasonally flooded depressions, riverine banks and floodplains characterized by a matrix of forested and scrub-shrub vegetation.
PFO/SSCh	Seasonally flooded depressions, riverine banks and floodplains characterized by a matrix of forested and scrub-shrub vegetation created by an impoundment.
PFO/SSCx	Seasonally flooded depressions, riverine banks and floodplains characterized by a matrix of forested and scrub-shrub vegetation created by an excavation.
PFO/SSF	Semi- permanently flooded depressions, riverine banks and floodplains characterized by a matrix of forested and scrub-shrub vegetation.
PFO/SSJ	Intermittently flooded depressions, riverine banks and floodplains characterized by a matrix of forested and scrub-shrub vegetation.
PFO/USA	Temporarily flooded depressions and floodplains characterized by a matrix of sparse forested vegetation and unconsolidated substrate.
PFO/USC	Seasonally flooded depressions and floodplains characterized by a matrix of sparse forested vegetation and unconsolidated substrate.

PFOA	Temporarily flooded depressions and floodplains dominated by forested vegetation.
PFOAh	Temporarily flooded depressions and floodplains dominated by forested vegetation and created by the construction of an impoundment.
PFOAx	Temporarily flooded depressions and floodplains dominated by forested vegetation and created by an excavation.
PFOB	Saturated forested wetland usually associated with springs. Common tree species include willow and cottonwood.
PFOC	Seasonally flooded depressions and floodplains dominated by forested vegetation.
PFOCh	Seasonally flooded depressions and floodplains dominated by forested vegetation and created by the construction of an impoundment.
PFOCr	Seasonally flooded depressions and floodplains dominated by forested vegetation with an artificial substrate and created by an excavation.
PFOCx	Seasonally flooded depressions and floodplains dominated by forested vegetation created by an excavation.
PFOJ	Intermittently flooded depressions, riverine banks and floodplains characterized dominated by forested vegetation.
PSS/EMA	Temporarily flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation.
PSS/EMAh	Temporarily flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation and created by an impoundment.
PSS/EMB	Saturated wetland consisting of a matrix of scrub-shrub and herbaceous vegetation usually associated with springs.
PSS/EMC	Seasonally flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation.
PSS/EMCh	Seasonally flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation and created by the construction of an impoundment.
PSS/EMCx	Seasonally flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation created by an excavation.
PSS/EMF	Semi-permanently flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation.
PSS/EMFh	Semi-permanently flooded depressions and floodplains characterized by a matrix of herbaceous and scrub-shrub vegetation created by an impoundment.

PSS/FOA	Temporarily flooded depressions and floodplains characterized by a matrix of scrub-shrub and forested vegetation.
PSS/FOAh	Temporarily flooded depressions and floodplains characterized by a matrix of scrub-shrub and forested vegetation created by an impoundment.
PSS/FOC	Seasonally flooded depressions and floodplains characterized by a matrix of scrub-shrub and forested vegetation.
PSS/FOCh	Seasonally flooded depressions and floodplains characterized by a matrix of scrub-shrub and forested vegetation created by an impoundment.
PSS/FOCx	Seasonally flooded depressions and floodplains characterized by a matrix of scrub-shrub and forested vegetation created by an excavation.
PSS/USA	Temporarily flooded depressions and floodplains characterized by a matrix of sparse scrub-shrub vegetation and unconsolidated substrate.
PSS/USAh	Temporarily flooded depressions and floodplains characterized by a matrix of sparse scrub-shrub vegetation and unconsolidated substrate and created by an impoundment.
PSS/USC	Seasonally flooded depressions and floodplains characterized by a matrix of sparse scrub-shrub vegetation and unconsolidated substrate.
PSS/USJ	Intermittently flooded depressions and floodplains characterized by a matrix of sparse scrub-shrub vegetation and unconsolidated substrate.
PSSA	Temporarily flooded scrub-shrub wetland usually located in drainages.
PSSAh	Temporarily flooded scrub-shrub wetland usually located in drainages and created by the construction of an impoundment.
PSSAx	Temporarily flooded scrub-shrub wetland usually located in drainages and created by an excavation.
PSSB	Saturated scrub-shrub wetland usually associated with springs.
PSSBh	Saturated scrub-shrub wetland usually associated with springs and created by an impoundment.
PSSC	Seasonally flooded scrub-shrub wetland usually located in drainages.
PSSCh	Seasonally flooded scrub-shrub wetland usually located in drainages and created by an impoundment.
PSSCr	Seasonally flooded scrub-shrub wetland with an artificial substrate and created by an excavation.

PSSCx	Seasonally flooded scrub-shrub wetland usually located in drainages and created by an excavation.
PSSJ	Intermittently flooded scrub-shrub wetland usually located in drainages.
PSSKx	Artificially flooded scrub-shrub wetland created by an excavation.
PSSR	Seasonally flooded, freshwater tidal floodplains and banks that are dominated by scrub-shrub vegetation.
PSSRh	Seasonally flooded, freshwater tidal floodplains and banks that are dominated by scrub-shrub vegetation and created by the construction of an impoundment.
PSSRx	Seasonally flooded, freshwater tidal floodplains and banks that are dominated by scrub-shrub vegetation and created by an excavation.
PSSS	Temporarily flooded, freshwater tidal floodplains and banks that are dominated by scrub-shrub vegetation.
PUB/ABFh	Semi-permanently flooded ponds with partial aquatic bed coverage and created by the construction of an impoundment.
PUB/ABHh	Permanently flooded ponds with partial aquatic bed coverage and created by the construction of an impoundment.
PUBF	Semi-permanently flooded ponds.
PUBFh	Semi-permanently flooded ponds created by the construction of an impoundment (e.g. stock ponds).
PUBFx	Semi-permanently flooded ponds created by an excavation (e.g. agriculture ponds and sediment basins).
PUBH	Permanently flooded pond.
PUBHh	Permanently flooded pond created behind an impoundment.
PUBHx	Permanently flooded pond created by excavation.
PUBKh	Artificially flooded pond with an artificial substrate and created by an excavation.
PUBKr	Artificially flooded pond with an artificial substrate (e.g., sewage detention pond).
PUBKx	Artificially flooded pond (e.g., sewage detention pond).
PUS/EMA	Temporarily flooded basins with some herbaceous vegetation.
PUS/EMAx	Temporarily flooded basins with some herbaceous vegetation created by an excavation.
PUS/EMC	Seasonally flooded basins with a matrix of unconsolidated substrate and herbaceous vegetation.
PUS/FOA	Temporarily flooded basins with some forested vegetation.
PUS/SSA	Temporarily flooded depressions with some scrub-shrub vegetation.
PUS/SSAh	Temporarily flooded depressions with some scrub-shrub vegetation and created by the construction of an impoundment.

PUS/SSC	Seasonally flooded depressions with some scrub-shrub vegetation.
PUS/SSCh	Seasonally flooded depressions with some scrub-shrub vegetation and created by the construction of an impoundment.
PUSA	Temporarily flooded depressions with little or no vegetation.
PUSAh	Temporarily flooded depressions with little or no vegetation and created by the construction of an impoundment.
PUSAr	Temporarily flooded depressions with little or no vegetation, an artificial substrate, and created by the construction of an impoundment.
PUSArx	Temporarily flooded depressions with little or no vegetation, an artificial substrate, and created by an excavation.
PUSAx	Temporarily flooded basins with little or no vegetation created by an excavation.
PUSC	Seasonally flooded depressions with little or no vegetation.
PUSCh	Seasonally flooded depressions with little or no vegetation and created by the construction of an impoundment.
PUSCr	Seasonally flooded depressions with little or no vegetation, an artificial substrate, and created by an excavation.
PUSCx	Seasonally flooded depressions with little or no vegetation created by an excavation.
PUSKh	Artificially flooded depressions with little or no vegetation, an artificial substrate, and created by the construction of an impoundment.
PUSKr	Artificially flooded depressions with little or no vegetation, an artificial substrate, and created by an excavation.
PUSKx	Artificially flooded depressions with little or no vegetation created by an excavation.
PUSS	Temporarily flooded freshwater tidal floodplains dominated by unconsolidated shore.
PUSSh	Temporarily flooded freshwater tidal floodplains dominated by unconsolidated shore and created by the construction of an impoundment.
PUSR	Seasonally flooded freshwater tidal floodplains dominated by unconsolidated substrate.
R1UBR	Seasonally flooded, tidally influenced riverine habitat.
R1UBV	Permanently flooded, tidally influenced riverine deepwater habitat.
R1UBVx	Permanently flooded, tidally influenced riverine deepwater habitat created by an excavation.
R1USRx	Seasonally flooded, tidally influenced riverine unconsolidated shore created by an excavation.
R2RBHx	Permanently flowing lower perennial rivers with a rock bottom created by an excavation.
R2UBF	Semi-permanently flowing lower perennial rivers.
R2UBFr	Semipermanently flowing lower perennial rivers with an artificial substrate and created by an excavation.
R2UBFx	Semi-permanently flowing lower perennial rivers created by an

	excavation.
R2UBH	Permanently flowing lower perennial rivers.
R2UBHr	Permanently flowing lower perennial rivers with an artificial substrate and created by an excavation.
R2UBHx	Permanently flowing lower perennial rivers or ditches created by an excavation.
R2USA	Temporarily flooded unconsolidated substrate associated with lower perennial riverine systems.
R2USAr	Temporarily flooded artificial substrate associated with lower perennial riverine systems created by an excavation.
R2USC	Seasonally flooded unconsolidated substrate associated with lower perennial riverine systems.
R2USCr	Seasonally flooded artificial substrate associated with lower perennial riverine systems created by an excavation.
R3RBH	Permanently flowing upper perennial rivers with a rocky substrate.
R3USC	Seasonally flooded unconsolidated substrate associated with upper perennial riverine systems.
R3UBH	Permanently flowing upper perennial rivers.
R3USC	Seasonally flooded unconsolidated substrate associated with upper perennial riverine systems.
R4SBA	Temporarily flowing riverine channels.
R4SBAr	Temporarily flowing riverine channels with an artificial substrate created by an excavation.
R4SBAx	Temporarily flowing riverine channels created by an excavation.
R4SBC	Seasonally flowing riverine channels.
R4SBCr	Seasonally flowing riverine channels with artificial substrate created by an excavation.
R4SBCx	Seasonally flowing riverine channels created by an excavation (e.g., agricultural drainage ditches)
R4SBJ	Intermittently flowing riverine channels.
R4SBJx	Intermittently flowing riverine channels created by an excavation.

Description of Special Modifiers:

SPECIAL MODIFIER	DESCRIPTION
h	Diked/Impounded – Created or modified by a man-made barrier or dam which obstructs the inflow or outflow of water.
f	Farmed – The soil surface has been mechanically or physically altered for production of crops, but hydrophytes will become reestablished if farming is discontinued.

r	Artificial – Substrates classified as Rock Bottom, Unconsolidated Bottom, Rocky Shore and Unconsolidated Shore that were emplaced by man using natural or synthetic materials.
x	Excavated – Lies within a basin or channel excavated by man.
s	Spoil - Wetland or deepwater habitat where the substrate is a result of the deposition of spoil materials.

Partial list of wetland and riparian plant species observed in the project area with indicator status (USFWS 1988)**:** Please see Appendix A.

Regional specialized conventions:

Linear features such as drainage channels, swales, streams, and artificial waterways are difficult to represent accurately. Mapping conventions have been developed through extensive fieldwork data collection to provide consistency with the representations of these habitats. A standard buffer width of 2.5 meters (for total feature width of 5.0 meters) is used on most linear features to provide some generalization of the width of the channel or swale. Channel width is modified for larger drainages and floodplains when the imagery allows for accurate interpretation. In forested areas where drainage channels are not clearly visible due to wetland and upland riparian canopy cover, the standard buffer width is used to depict the typical wetland bank vegetation of the project area. In most cases, this is defined as a mosaic of forest and scrub-shrub vegetation on the drainage banks. For more information, please see Project Standard Operating Procedure at: http://www.socalwetlands.com/website/Documents/SOP_SOCALPROJECT_050707.pdf.

Other discussion of mapping issues (image quality, water conditions, etc.):

This project used several sources and dates of ortho-rectified imagery to delineate wetland resources. Alignment issues always occur with multiple sources of imagery. In most cases, the delineations were created using the source imagery listed above, with no further retro-fitting to match other, often older, imagery sources. However, on few occasions, original delineations from the source imagery were retro-fitted to another source of imagery such as the CIR if deemed appropriate. Examples of this would include the seasonal fluctuations observed in large reservoirs or the additional detail CIR provides for delineating estuarine systems. For more information, please see Project Standard Operating Procedure at: http://www.socalwetlands.com/website/Documents/SOP_SOCALPROJECT_050707.pdf.

References:

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